



UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE
United States Patent and Trademark Office
Address: COMMISSIONER FOR PATENTS
P.O. Box 1450
Alexandria, Virginia 22313-1450
www.uspto.gov

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/027,097	12/20/2001	Joshua R. Kornau	21456-13	2720

24256 7590 11/19/2003

DINSMORE & SHOHL, LLP
1900 CHEMED CENTER
255 EAST FIFTH STREET
CINCINNATI, OH 45202

EXAMINER

HEWITT, JAMES M

ART UNIT	PAPER NUMBER
----------	--------------

3679

DATE MAILED: 11/19/2003

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

10/027,097

Applicant(s)

KORNAU ET AL.

Examiner

James M Hewitt

Art Unit

3679

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
- Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 18 August 2003.
- 2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-10, 13, 14, 19, 20, 24, 25, 30, 31 and 33 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☒ Claim(s) 30 is/are allowed.
- 6) ☒ Claim(s) 1-5, 8-10, 13, 14, 19, 20, 24, 25, 31 and 33 is/are rejected.
- 7) ☒ Claim(s) 6 and 7 is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
- Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
- 11) ☐ The proposed drawing correction filed on _____ is: a) ☐ approved b) ☐ disapproved by the Examiner.
- If approved, corrected drawings are required in reply to this Office action.
- 12) ☐ The oath or declaration is objected to by the Examiner.

Priority under 35 U.S.C. §§ 119 and 120

- 13) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
- ☐ Certified copies of the priority documents have been received.
 - ☐ Certified copies of the priority documents have been received in Application No. _____.
 - ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- * See the attached detailed Office action for a list of the certified copies not received.
- 14) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. § 119(e) (to a provisional application).
- a) ☐ The translation of the foreign language provisional application has been received.
- 15) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. §§ 120 and/or 121.

Attachment(s)

- | | |
|----------------------------------------------------------------------------------------------|-----------------------------------------------------------------------------|
| 1) <input type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413) Paper No(s). _____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152) |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO-1449) Paper No(s) _____ | 6) <input type="checkbox"/> Other: |

DETAILED ACTION

Claim Objections

Claims 6-7 are objected to because of the following informalities:

In claim 6 line 6, "the fastener" lacks antecedent basis. To correct for this, the examiner suggests deleting the phrase "for receiving the fastener" from lines 5-6, and inserting the phrase "received in the apertures" between "fastener" and "for" on line 11.

Note that claim 7 is objected to because it depends from claim 6.

Appropriate correction is required.

Claim Rejections - 35 USC § 102

The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

Claims 1-5, 10, 24-25, 31 and 33 are rejected under 35 U.S.C. 102(b) as being anticipated by Wolters et al (US 4,036,258).

With respect to claim 1 and with particular reference to the embodiment of Figures 3 and 4, Wolters et al disclose a self-aligning coupling for mating a pair of axial arranged first and second flanged fittings (6, 6a with flanges 2, 2a), the coupling comprising: first and second arms (10, 10a) adapted for pivotal connection to one another and having open and closed relative pivotal positions in use (see Figures 3 and

Art Unit: 3679

4); and a rotational assist mechanism (pneumatic drive arrangement) adapted to mechanically effectuate the closing of the first and second arms relative to the pair of flanged fittings (6, 6a) to be connected in use, and further adapted to provide motion between the first arm and the second arm to receive and secure the second flanged fitting angularly misaligned relative to the first flanged fitting. Refer to ***Response to Arguments*** below.

With respect to claim 2, further comprising a seal (see O-ring disposed between abutting faces of the fittings in Figure 1) for providing sealed fluid communication between the first flanged fitting and the second flanged fitting.

With respect to claim 3, further comprising an interior surface having a conical self-alignment portion adapted to orient the second flanged fitting relative to the first flanged fitting.

The interior surface of arms (10, 10a) defines an inner groove which is conical and abuts and encompasses the outer surfaces of the flanges (2, 2a). This is shown in Figure 1.

With respect to claim 4, wherein the self-alignment portion is adapted to orient the two flanged fittings from a maximum of about 10 degrees of angular misalignment therebetween.

Note that it has been held that the recitation that an element is "adapted to" perform a function is not a positive limitation but only requires the ability to so perform. It does not constitute a limitation in any patentable sense. *In re Hutchison*, 69 USPQ

Art Unit: 3679

138. Wolters' conical surface is considered able to orient the two flanged fittings from a maximum of about 10 degrees of angular misalignment therebetween.

With respect to claim 5, further comprising a fastener (13) for further securing the arms in the closed position (see Figure 3 and col. 4 lines 59-62).

With respect to claim 10, further wherein each arm comprises a single mating groove adapted to receive the flanges of the two fittings in use. Refer to the rejection of claim 3.

With respect to claim 24 and with particular reference to the embodiment of Figures 3 and 4, Wolters et al disclose a self-aligning coupling for mating a pair of corresponding flanged fittings (6, 6a with flanges 2, 2a), comprising: a pair of arms (10, 10a) adapted for pivotal connection between open and closed positions, the arms at least partially defining a mating groove (refer to the rejection of claim 3) adapted to receive at least portions of the pair of flanged fittings to be coupled; and a rotational assist mechanism (pneumatic drive arrangement) linking the arms and adapted to move the arms such that the flanged fittings being angularly misaligned can be received in the mating groove as the arms are effectively pivoted in a closed position. Refer to

Response to Arguments below.

With respect to claim 25, wherein the rotational assist mechanism comprises first and second interacting members (44, 45) adapted to mechanically synchronize rotational orientation of the two arms as they are pivoted in use.

With respect to claim 31, wherein the arms are hingedly oriented in a clamshell arrangement relative to one another in use.

Art Unit: 3679

With respect to claim 33, wherein the rotational assist mechanism (pneumatic drive arrangement) effectuates the closing of the first and second arms relative to the pair of flanged fittings by moving the first and second arms in synchronization. Refer to Figures 3 and 4. It should be understood that the pneumatic piston/cylinder arrangement acts to move arms (10, 10a) in sync.

Claims 13-14, and 19-20 are rejected under 35 U.S.C. 102(b) as being anticipated by Cooper et al (US 3,744,825).

With respect to claim 13, Cooper et al disclose a self-aligning coupling for mating a pair of axial arranged first and second pipes (12), the mating ends of the first and second pipes having first and second flanged fittings (14, 16), respectively, the self-aligning coupling comprising: a first arm (46) having a base end (at hinge) and a receiving end (at 64), the first arm base end pivotally connected adjacent to the first flanged fitting in use; and a second arm (48) having a base end (at hinge) and a receiving end (at 60, 62), the second arm base end pivotally connected adjacent to the first flanged fitting in use, wherein the second arm base end engages the first arm base end whereby the receiving ends of the arms can be synchronously moved (e.g. manually) between an open position and a closed position to receive and secure the flanged fitting of the second pipe. Refer to **Response to Arguments** below.

With respect to claim 14, wherein at least one of the arms comprises a self-alignment surface (50) which angularly aligns the second fitting with the first fitting in the closed position.

Art Unit: 3679

With respect to claim 19, further comprising a mating groove (50) at least partially defined by a portion of each arm.

With respect to claim 20, further comprising a seal (18) disposed within the mating groove in use.

Claim Rejections - 35 USC § 103

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

Claims 8-9 are rejected under 35 U.S.C. 103(a) as being unpatentable over Wolters et al (US 4,036,258) in view of Fahnoe (US 3,575,683)

Wolters et al teaches all limitations of claims 8 and 9 except for a garter spring arranged to normally bias the arms toward the closed position. Fahnoe teaches the use of a garter spring to maintain and ensure engagement of an outer sleeve (70) with a pipe section (73) to provide a good electrical connection. Although specifically Fahnoe teaches the use of a garter spring to provide a good electrical connection between components, in a broad sense the spring is used to maintain a tight and secure connection between two parts, and in view of Fahnoe's teaching, it would have been obvious to one having ordinary skill in the art at the time the invention was made to modify Wolters' device to further include a garter spring in order to maintain and ensure a tight and secure connection between the two pipe fittings.

Art Unit: 3679

Wolter's arms include a groove on the outer surface peripheral surface thereof.

This groove is shown in Figure 1 on the outer surface of arms 3, 3a and is suitable to hold a garter spring.

With respect to claim 9, further including a groove on an outer surface of the first and second arms (see groove shown in Figure 1 on outer surface of arms 3, 3a).

Allowable Subject Matter

Claims 6-7 are objected to (see ***Claim Objections***), but would be allowed if the above noted objection is overcome.

Claim 30 is allowed.

Response to Arguments

Applicant's arguments filed 8/18/03 have been fully considered but they are not persuasive.

On page 11, lines 7-13, of the amendment filed 8/18/03, Applicant asserts "Wolters et al do not disclose a coupling device which corrects angular misalignment between the first and second flanged fittings as taught by the present invention. In view of the failures of Wolters et al to teach a self-aligning coupling as defined by claims 1 or 24, particularly in regards to a self-aligned coupling which connects flanged fittings having angular misalignment as presently claimed, Wolters et al do not disclose each element of the claims under consideration, and therefore, does not anticipate the self-aligning coupling of claims 1 or 24 under 35 U.S.C. 102." Claim 1 requires the rotational

Art Unit: 3679

assist mechanism be "further adapted to provide motion between the first arm and the second arm to receive and secure the second flanged fitting angularly misaligned relative to the first flanged fitting." First, it should be noted that the recitation that an element is "adapted to" perform a function is not a positive limitation but only requires the ability to so perform. It does not constitute a limitation in any patentable sense. *In re Hutchison*, 69 USPQ 138. So, in order to meet the above quoted limitation of claim 1, Wolters' rotational assist mechanism (his pneumatic drive arrangement) must be able to provide motion between the first arm and the second arm to receive and secure the second flanged fitting angularly misaligned relative to the first flanged fitting. Wolters' pneumatic piston/cylinder arrangement acts to move Wolters' first and second arms (10, 10a). The arms each include a conical groove that receives and secures the flanges (2, 2a) of fittings (6, 6a) to be joined (refer to Figure 1 and column 4, lines 60-62). The Examiner considers the configuration of the grooves to be such that if the second fitting were to be slightly angularly misaligned (i.e. in Figure 1, if the second fitting were disposed such that its left end extended slightly out of the page and its right end extended slightly into the page), the surfaces of the grooves, upon the arms moving to their closed position, would act to cause the second fitting to move back into alignment with the first fitting and have their end faces abut. For the same reasons, Wolters et al is considered to anticipate claim 24. Also it should be noted that Wolter's coupling device is considered to be self-aligning in that the structure of the device is such that it acts to align the two fittings (6, 6a).

Art Unit: 3679

On page 13, lines 6-14, Applicant asserts "Cooper et al do not disclose a self-aligning coupling device where the receiving ends of first and second arms can be synchronously moved between an open position and a closed position to receive and secure the flanged fitting of a second pipe as taught by the present invention. In view of the failures of Cooper et al to teach a self-aligning coupling as defined by claim 13, particularly in regards to a self-aligned coupling having synchronous movement between the arms to secure the second flanged fitting, as presently claimed, Cooper et al do not disclose each element under consideration, and therefore, does not anticipate the self-aligning coupling of claim 13 under 35 U.S.C. 102." Claim 13 requires a self-aligning coupling "wherein the second arm base end engages the first arm base end whereby the receiving ends of the arms can be synchronously moved between an open position and a closed position to receive and secure the flanged fitting of the second pipe." First, it should be noted that the functional "whereby" statement does not define any structure and accordingly can not serve to distinguish. *In re Mason*, 114 USPQ, 127, 44 CCPA 937 (1957). Even still, the receiving ends of the arms can be synchronously moved (e.g. manually) between an open position and a closed position to receive and secure the flanged fitting of the second pipe. A user can take one arm in each hand and move the ends of the arms synchronously between an open and closed position to receive and secure the flanged fitting of the second pipe. Also it should be noted that Cooper's coupling device is considered to be self-aligning in that the structure of the device is such that it acts to align the two pipes (12).

Art Unit: 3679

On page 14, line 23 through page 15, line 15, Applicant merely states that Fahnoe does not rectify the failings of Wolters et al and does not refute or present any arguments against the combination of Walters and Fahnoe to reject claims 8 and 9.

Conclusion

THIS ACTION IS MADE FINAL. Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

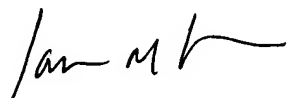
A shortened statutory period for reply to this final action is set to expire **THREE MONTHS** from the mailing date of this action. In the event a first reply is filed within **TWO MONTHS** of the mailing date of this final action and the advisory action is not mailed until after the end of the **THREE-MONTH** shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than **SIX MONTHS** from the mailing date of this final action.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to James M Hewitt whose telephone number is 703-305-0552. The examiner can normally be reached on M-F, 930am-600pm.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Lynne Browne can be reached on 703-308-1159. The fax phone number for the organization where this application or proceeding is assigned is (703) 872-9306.

Art Unit: 3679

Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the receptionist whose telephone number is 703-308-1113.

A handwritten signature in black ink, appearing to read "James M. Hewitt".

James M. Hewitt
Patent Examiner
Technology Center 3600